



# **CALIFORNIA ENERGY RESOURCES SCHEDULING DIVISION (CERS)**

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## **CERS Overview and Long-Term Energy Contracts Summary**

***March 2009***



# CERS History

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## **Winter 2000-2001**

Spot market prices skyrocket to \$2,000 a megawatt hour while averaging about \$400 per MWh – nearly 10 times the cost of power at the same time in the previous year.

Debt grows for California's investor-owned utilities (IOUs) as purchased power costs exceed what they are able to recoup from ratepayers. Suppliers refuse to sell to IOUs over credit concerns.

Large amounts of generators off-line resulting in statewide rotating blackouts.

## **Governor Issues Emergency Proclamation**

On January 17, 2001, the Governor issues an Emergency Proclamation directing the Department of Water Resources (DWR) to purchase power on behalf of the State's IOU customers.

DWR created a new division within DWR, the California Energy Resources Scheduling (CERS) division, that immediately began purchasing power. During the summer of 2001 alone, CERS had purchased 17,000 megawatts of electricity, enough power to supply about 17 million homes and businesses. By the end of 2001, CERS spent nearly \$11 billion to keep the power flowing in California.

## **Long-Term Power Contracts**

To reduce its daily exposure to the volatile spot energy market, CERS entered into various long-term contracts to lock in more stable, predictable prices.

The contracts also resulted in an injection in new power supplies by providing a guaranteed revenue source needed to finance more than 5,000 megawatts of newly built power plants. In total, the Department entered into 58 long-term agreements in 2001 and 2002 at a cost of \$42 billion. These contracts represent less than 25 percent of the energy requirements for the investor-owned utilities through 2010.



# CERS History – Cont.

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## **Power Markets Stabilize - Reliability Restored**

The average spot market price of electricity fell from \$355 per megawatt hour in January 2001 to \$72 a megawatt hour just five months later. There were no power interruptions in the summers of 2001 or 2002.

CERS concluded its daily power purchases operation on January 1, 2003, successfully returning that responsibility to the utilities who were able to improve their credit standing during DWR's nearly two years as California's principal power buyer.

CERS currently manages its financial and legal responsibilities for its long-term contracts as well as its responsibility to repay its bond debt.

## **Contracts Renegotiated**

By the end of 2003, CERS had successfully renegotiated 35 of its original 58 agreements – saving more than \$7.5 billion in contract costs. CERS will continue to seek greater ratepayer value from the contracts when opportunities to improve contract conditions arise.

## **Energy Refunds**

CERS successfully negotiated refunds from energy companies that engaged in manipulative market behavior resulting in settlements totaling nearly \$5.5 billion.



# Remaining Role

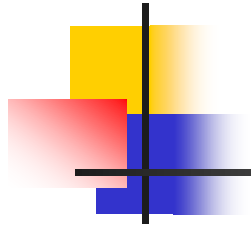
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## **CERS Today**

The utilities currently act as CERS' agent in managing and dispatching the energy associated with the long-term contracts. Absent full assignment of the contracts to the utilities, CERS fulfills its financial and legal responsibilities for the contracts by auditing the utilities' performance to ensure accurate billing and supplier compliance with contract terms, as well as reviewing and approving utility gas supply plans and financial hedging for those contracts with gas tolling arrangements.

CERS also services \$11.2 billion in bonds that were sold in October and November 2002 to pay for its power purchases. Bond proceeds were used to repay \$6.5 billion to the General Fund, retire a \$3.4 billion short-term loan, and to maintain adequate reserve levels. CERS produces an annual Revenue Requirement – filed with the California Public Utilities Commission – that specifies the contract and bond-related expenses that must be recovered from the utility customers, and actively monitors and reports on its revenue flows and operating balances in compliance with its financial duties related to the bonds.

The task of effectively managing the State's portfolio of contracts and bond financing is significant to maintaining reliability in California's energy supplies while holding down costs for ratepayers. Both of these complex and critical responsibilities will continue until the last of the contracts expires in 2015 and the bond debt is completely retired in 2022.



# Long-Term Contracts Summary



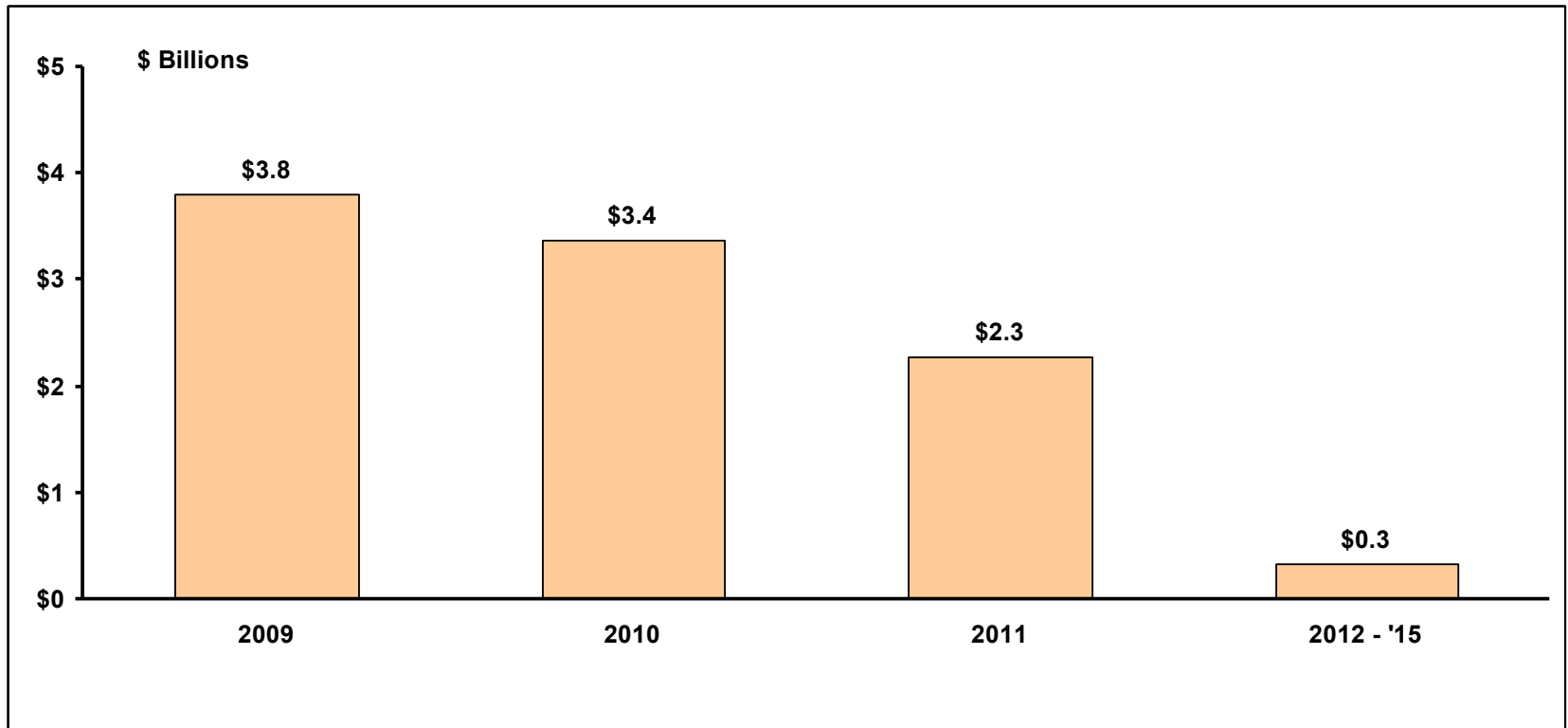
# Long-Term Contracts Summary

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- **Number of Original agreements: 58**
- **Original portfolio projected cost: \$42.5 billion**
- **Agreements Renegotiated: 35**
- **Number of original counter-parties: 30** – Allegheny, Alliance Colton, BPA, CalPeak, Calpine, Capitol, Clearwood, Constellation, High Desert, Coral, Dynegy, El Paso, GWF, Intercom, Kings River, PG&E Energy Trading, PacifiCorp, Pinnacle West, Mirant, Morgan Stanley, Primary Power (Imperial Valley), PX Block Forward, San Francisco, Santa Cruz, Sempra, Soledad, Sunrise, Whitewater Energy, Williams, Wellhead.
- **Number of counter-parties with renegotiated contracts: 19** -- Calpine, High Desert, Constellation, Whitewater Energy, Capitol Power, CalPeak, GWF, Colton Power, Mountain View Power Partners (formerly PG&E Trading contract), Williams, Clearwood, Wellhead, County of Santa Cruz, Sunrise Power, Goldman Sachs (formerly Allegheny contract), Soledad, El Paso, Morgan Stanley, Mirant.
- **Cost reductions through renegotiations: Approximately \$7.5 billion**
- **Agreements expired: 28**
- **Agreements terminated: 4**
- **Number of agreements remaining (from original 58): 26**
- **Current projected portfolio cost (2009-2015): \$9.8 billion**  
DWR's long-term contracts are available at [www.cers.water.ca.gov](http://www.cers.water.ca.gov).

## Long-Term Contracts Summary – cont.

The remaining cost for the portfolio of contracts, from 2009 through 2015, is approximately \$9.8 billion dollars.

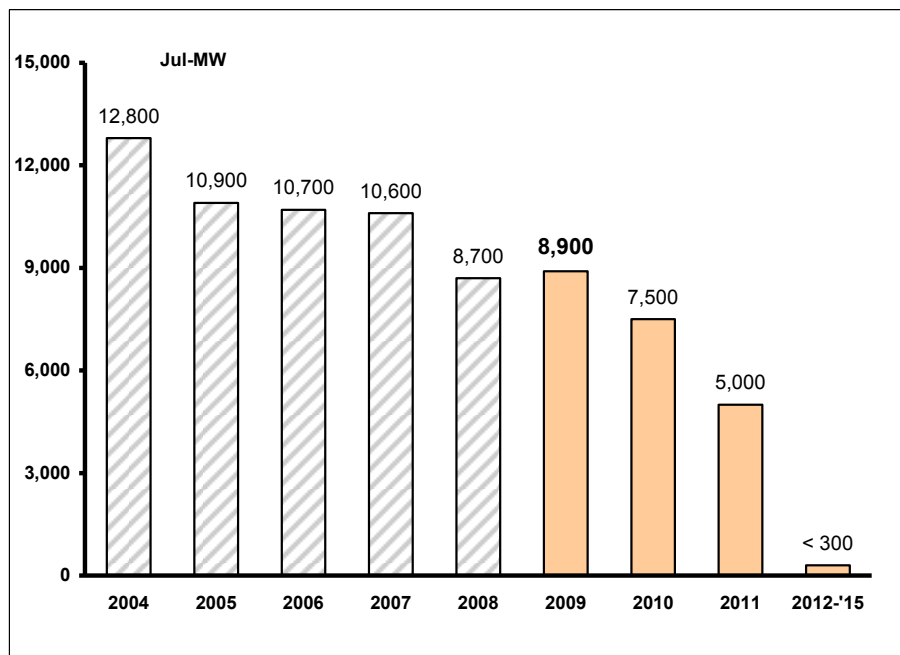


Note: Annual projections may vary due to updates to gas price forecasts, contract utilization, and other assumptions.

# Long-Term Contracts Summary – cont.

The long-term contracts portfolio peaked in 2004 at 12,800 megawatts, remains above 10,000 megawatts through 2007, and then significantly drops off after 2010.

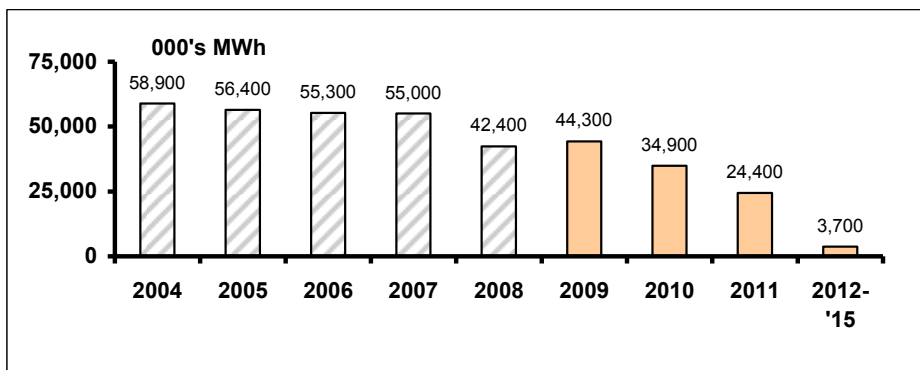
Contract Capacity (MW)



Notes:

Includes all renegotiated contracts to-date.

Contract Energy (MWh)



	% of Annual Energy								
	'04	'05	'06	'07	'08	'09	'10	'11	'12-'15
Must-Take	87%	81%	82%	83%	80%	76%	70%	78%	33%
Dispatchable	12%	18%	17%	17%	19%	23%	29%	20%	52%
Renewable	1%	1%	1%	1%	1%	1%	1%	2%	16%

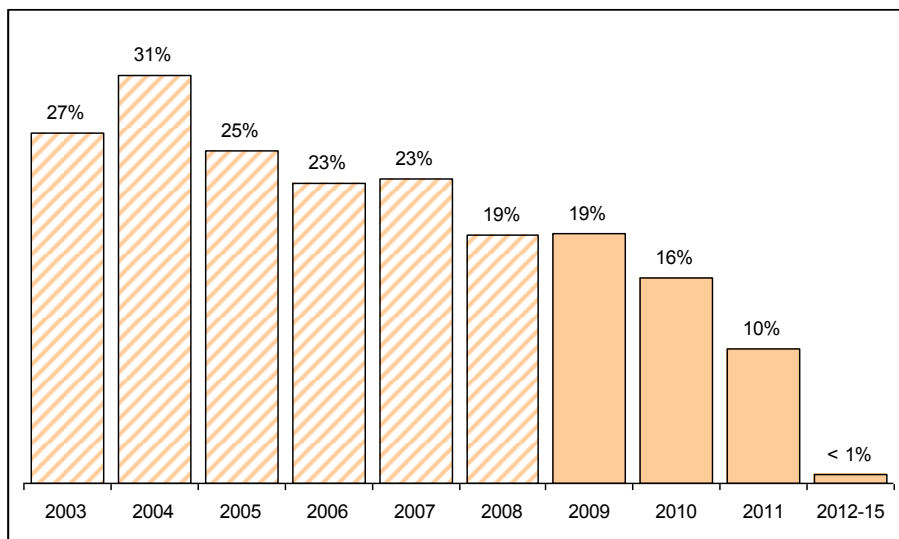
(%s may not add to 100% due to rounding)



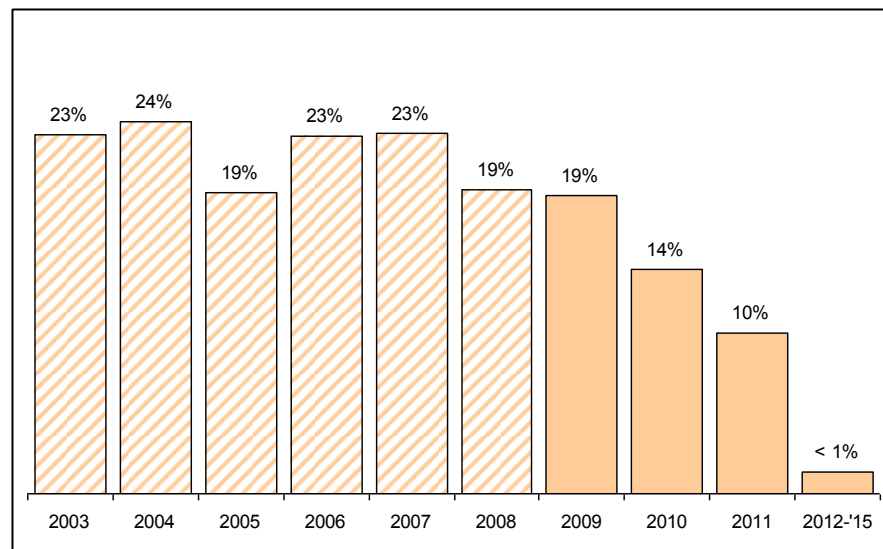
## Long-Term Contracts Summary – cont.

In 2004, DWR covered 31% of the three utilities peak demand and 24% of their energy requirements.

Peak Demand



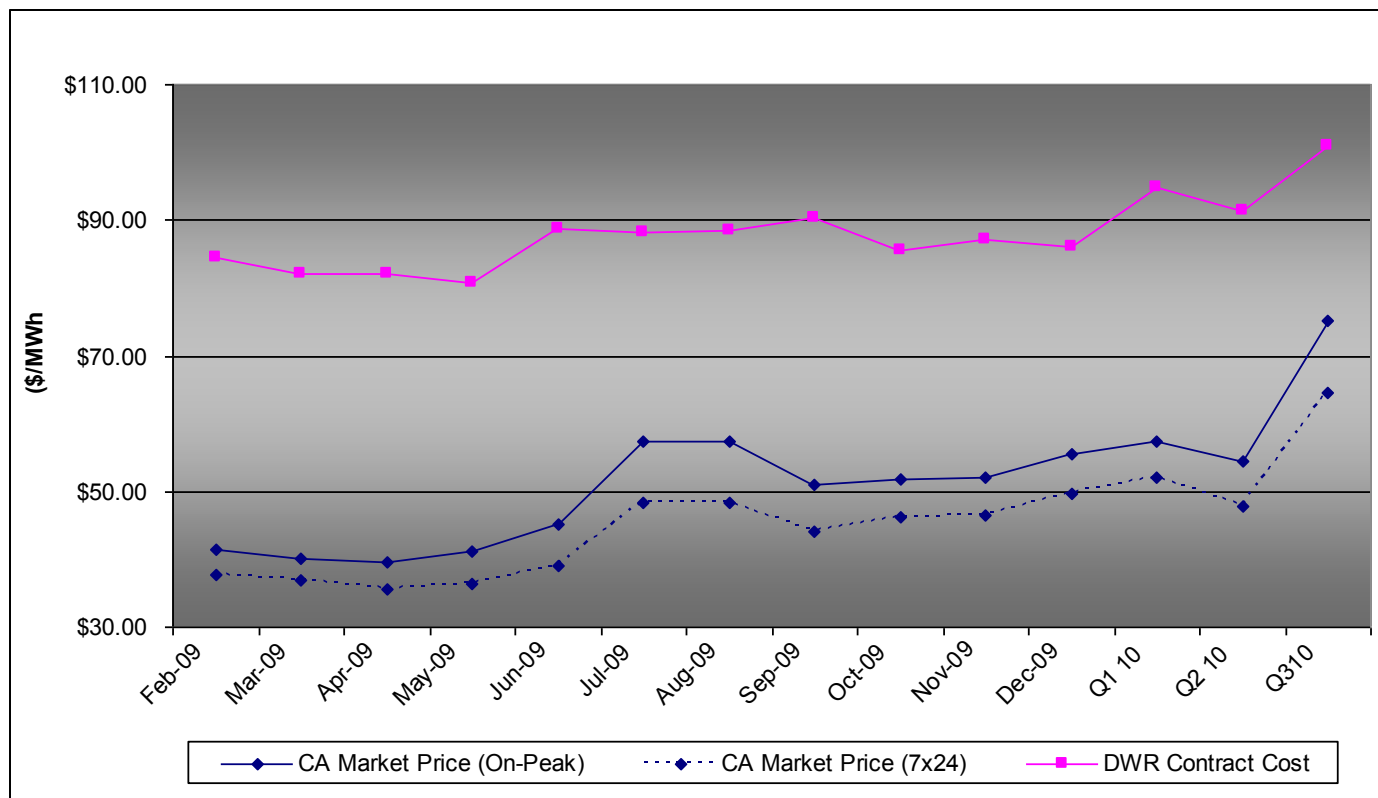
Annual Energy



Note: Historical percentages (2003-2007) are approximate and are based on a DWR analysis of publicly available information from Investor Owned Utilities (PG&E, SCE, and SDG&E). Projected percentages are based upon DWR's October 29, 2008 Revenue Requirement (PM-14) filed at the California Public Utilities Commission (CPUC) and current California Energy Commission (CEC) projections of IOU load requirements.

## Long-Term Contracts Summary – cont.

CDWR's full portfolio of energy contracts compared to the current electricity forward market as of January 26, 2009.



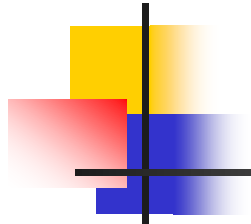
Note: CDWR Contract Cost (\$/MWh) is "All-In" expected total cost of CDWR Contracts divided by expected generation (MWh).  
CA Market Price is the simple weighted average of NP15 and SP15 Peak and Off-Peak energy forward prices.

# Long-Term Contracts Summary – cont.

## Expiration dates of the remaining long-term contracts portfolio

Contracts in Effect 2009 (Year-end expiration unless otherwise noted)										
2003	2009	2010	2011	2012	2013	2014	2015			
<b>Constellation Power</b> (Prod 1 expired Jun-'03, Prod 2 expired Oct-'03)	<b>Calpine 1</b>	<b>Colton Power</b> (Oct-'10)	<b>Calpeak(s)</b> (2 projects Oct-'11, 3 projects Dec-'11)	<b>Coral</b> (Jun-'12)	<b>Shell Wind Energy</b> (2 Contracts, formally WhtWtr. Cabazon & Hill)	No Contracts Expire	<b>Kings River</b> (Sept-'15)			
<b>Goldman Sachs Group</b> (NP-15 product)		<b>JP Morgan</b> (formally Williams) (Product B,C,D, & Gas Supply Contract)	<b>Calpine 3</b> (Jul-'11)	<b>GWF Ph3</b> (Oct-'12)			<b>CCSF</b> (TBD)			
<b>Intercom</b> (Expired Aug-'03)			<b>Goldman Sachs</b> (formally Allegheny)	<b>Sunrise</b> (Jun-'12)						
<b>Primary Power</b>			<b>GWF</b> (Phase 1 & 2)	<b>Calpine 2</b> (reneg. w/ 3-Yr option)						
<b>2004</b>			<b>High Desert</b> (Mar-'11)							
<b>Dynegy</b>			<b>Mountainview Wind</b> (formally PG&E ET) (Sept-'11)							
<b>2005</b>			<b>Iberdrola</b> (formally Pacificorp) (Jun-'11)							
<b>El Paso</b>			<b>Semptra</b> (Sept-'11)							
<b>Morgan Stanley</b>			<b>Wellhead(s)</b> 3 projects (Oct-'11)							
<b>2006</b>										
<b>Calpine 4</b> (San Jose)										
<b>Soledad</b>										
<b>2007</b>										
<b>Williams</b> (Product A)										
<b>2008</b>										
No Contracts Expired										
Contract MW's Expiring** (non-coincident)										
3,590	1,000	1,450	4,670	1,520	100	0	290			

(\*) MW's shown were available during all or part of the calendar year that will not be available the following year. Contract MW's expiring are non-coincident and not cumulative due to expiration date and annual MW's may vary.



# Summary Results of Renegotiations



# Summary Results

Since 2002, CDWR has reduced its portfolio costs by \$7.5 billion through renegotiating contracts with 19 of its original 30 counter-parties. There are three contracts under their original terms.

Number of Counterparties with Contracts under Renegotiated Terms		Savings (\$' Millions)	Counterparties with Contract under Original Terms	Counterparties with Expired Contracts	Contracts Terminated
1	Calpine	\$2,900	Coral	BPA	Capitol Power <sup>3</sup>
2&3	High Desert / Constellation Power <sup>1</sup>	\$560	Iberdrola (formally PacifiCorp)	Calpine 4	Clearwood <sup>4</sup>
4	Shell Wind Energy <sup>2</sup> (formerly Whitewater Energy Corp)	\$38	Sempra	Constellation Power <sup>1</sup>	Santa Cruz County <sup>5</sup>
5	Capitol Power <sup>3</sup>	\$6.3		Intercom	Soledad <sup>6</sup>
6	CalPeak	\$71		Dynegy	
7	Soledad	\$1.7		El Paso	
8	GWF	\$215		Mirant	
9	Colton Power (formerly Alliance contract)	\$14.6		Morgan Stanley	
10	Mountainview (formerly PG&E ET Wind contract)	\$2.8		Pinnacle West	
11	Williams	\$1,373		Primary Power	
12	Clearwood	\$28		PX Block Forward	
13	Wellhead	\$8.2			
14	Santa Cruz County <sup>5</sup>	\$1.8			
15	Sunrise	\$121			
16	Goldman Sachs Group (formerly Allegheny contract)	\$836			
17	El Paso	\$125			
18	Morgan Stanley	\$40			
19	Mirant	\$87.5			
20	Calpine 2	\$1,022			
<b>Total Savings (\$'s Millions)</b>		<b>\$7,452</b>			

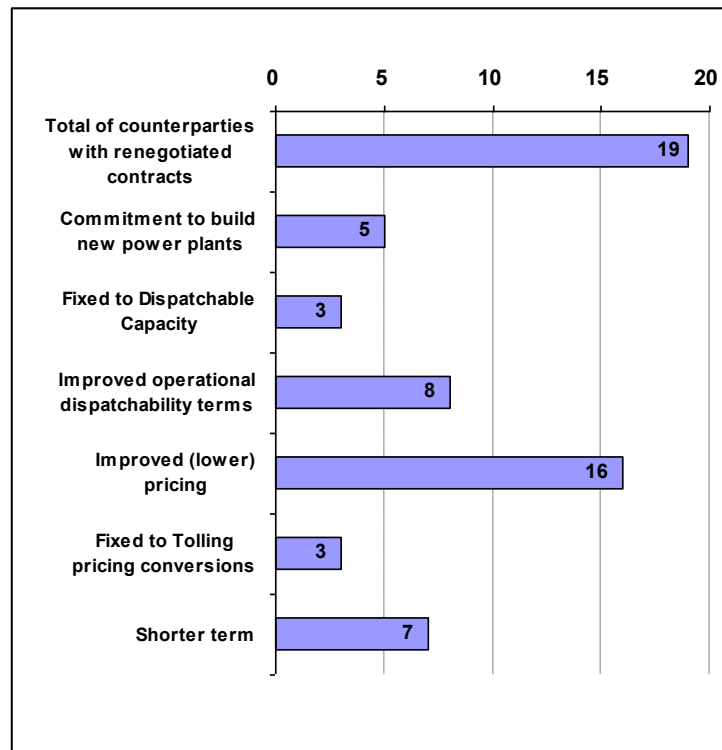
## Notes:

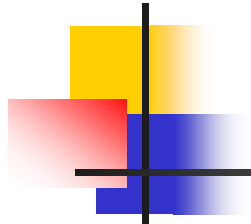
(1) Constellation Power Systems contract, Product 1 expired Jun-'03 and Product 2 expired Oct-'03; (2) Shell Wind Energy consists of two wind projects, formerly Whitewater Hill and Cabazon; (3) Capitol Power terminated in Nov '02; (4) Clearwood terminated in Jan '07; (5) Santa Cruz County terminated in Jan. '04; (6) Soledad terminated Jan-31, 2006.

## Summary Results - cont.

Renegotiations have resulted in improved reliability and contract savings of \$7.5 billion (a 17.5% reduction from the initial projection of \$42.5 billion). Improved reliability is the result of securing generator commitment to build new power plants. Savings are based on improved contract terms, such as lower pricing and shorter terms, and increased dispatchability.

### CDWR Improvement in Contract Terms due to Renegotiations





# Summary of Energy Settlements



# Energy Settlements

California parties have negotiated \$5.5 billion in settlements with various energy companies who reaped unjust profits during 2000 and 2001.

Company	Settlement Amount (\$ Millions)
Williams	\$1,867.4
El Paso	\$1,500.0
Dynegy	\$281.5
Duke	\$200.5
Mirant	\$645.1
Enron	\$278.7
Public Service Colorado	\$7.3
Reliant	\$507.6
Idaho Power	\$24.3
Eugene Water and Electric Board	\$0.4
Portland General Electric	\$63.3
PacifiCorp	\$28.3
PPM	\$0.3
Conectiv	\$0.7
Midway Sunset	\$80.2
City of Anaheim	\$1.8
City of Riverside	\$1.4
City of Azusa	\$0.9
Strategic Energy	\$1.6
Grant County	\$13.8
<b>Total Settlement Amount</b>	<b>\$5,505.0</b>

\* Amounts are totals as of January 2009.



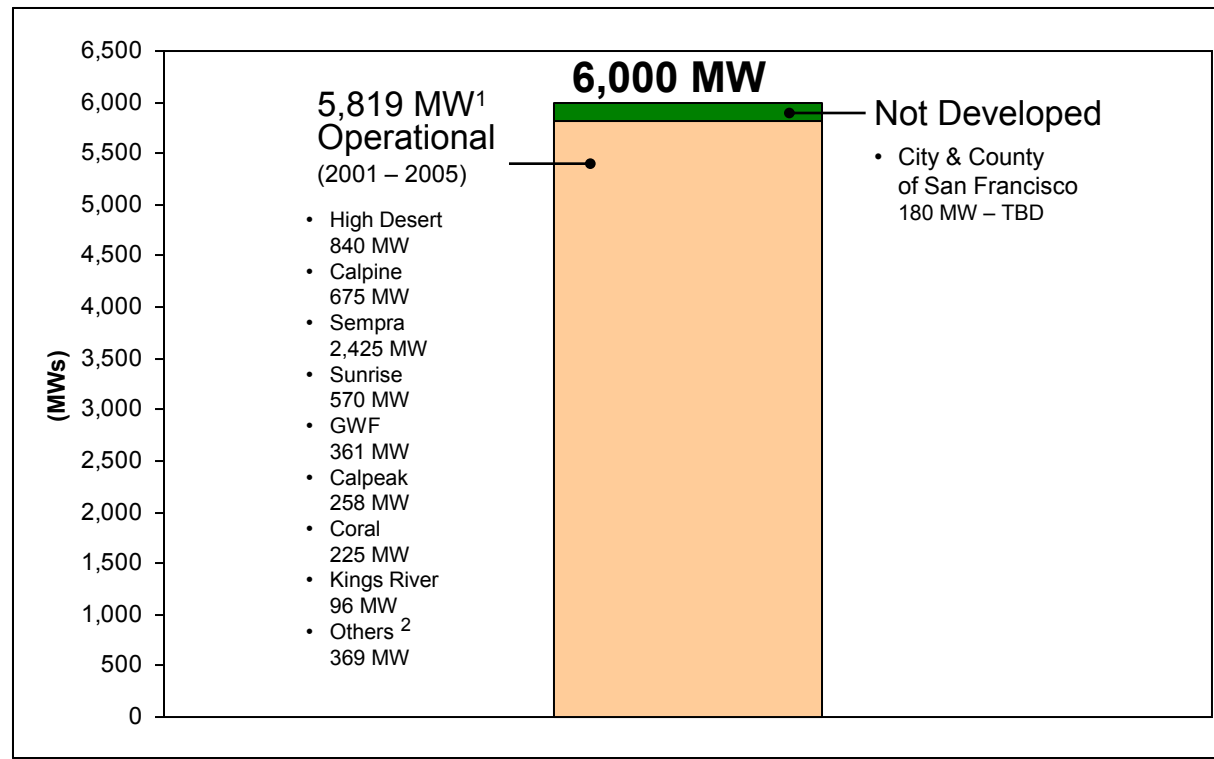


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## **New Power Plants Supported by CDWR Long-Term Contracts**

# New Power Plants

Supporting CDWR contracts, 37 new power plants totaling 5,999 megawatts have become operational since 2001, one more power plant may be built.



Notes:

(1) Includes 1,875 MW of operational out-of-state projects built by Sempra (Mesquite Ph-1, Ph-II, and Mexicali).

(2) Other projects include: Colton Power (2), Mountain View, Shell Wind Energy (2), and Wellhead (3).